

1. A wireless mobile device adapted to access a wireless network comprising:
a subscriber identification module (SIM) card slot; and
a contactless smart card module electrically connected to said SIM card slot; and
5 wherein said contactless smart card module is adapted to receive and read
information stored in a contactless smart card and transmit said information to an entity
via said wireless network.
2. The wireless mobile device of claim 1 wherein said contactless smart card module
10 is further adapted to receive information from said entity via said network and transmit
and write said information in said contactless smart card .
3. The wireless mobile device of claim 1 wherein said information is selected from a
group consisting of cardholder identification information, card identification information,
15 authentication information, smart card issuer information, financial institution
information, digital goods, digital services, and digital currency.
4. The wireless mobile device of claim 3 wherein said digital goods are selected
from a group consisting of electronic cash, electronic coupons, electronic gift certificates,
20 electronic transit tokens,, music, software, movies, and books.
5. The wireless mobile device of claim 1 further comprising;
a memory;
a Central Processing Unit (CPU);
25 a SIM card connected to said SIM card slot, said SIM card authenticating said
wireless mobile device to said wireless network; and
a first application program associated with said memory and said CPU and being
adapted to receive and transmit instructions from said contactless smart card module to
said wireless mobile phone and the reverse.

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6. The wireless mobile device of claim 5 further comprising a second application program associated with said memory and said CPU and being adapted to route and transmit data and information among said wireless mobile phone, said smart card module, and other interfaces connected to said CPU.

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7. The wireless mobile device of claim 6 wherein said other interfaces are selected from a group consisting of smart card interfaces, infrared transceiver interfaces, serial communication interfaces, and magnetic stripe reader interfaces.

10 8. The wireless mobile device of claim 6 wherein said first and second application programs are stored in storage selected from a group consisting of said CPU, said SIM card, an external SIM card, said contactless smart card, and an external card.

15 9. The wireless mobile device of claim 1 further comprising an antenna for receiving and transmitting messages to and from said contactless smart card.

20 10. The wireless mobile device of claim 1 wherein said wireless mobile device is selected from a group consisting of a mobile phone, a personal digital assistant, a pager, a wireless laptop computer, a personal computer, a television remote control, and combinations thereof.

25 11. The wireless mobile device of claim 1 wherein said wireless network is selected from a group consisting of a wireless wide area network (WWAN), a wireless local area network (WLAN), a private network, and a personal area network (PAN).

30 12. The wireless mobile device of claim 11 wherein said wireless wide area network (WWAN) is selected from a group consisting of a Global System for Mobile Communications(GSM), a Code Division Multiple Access(CDMA), CDMA 2000, and wideband CDMA(WCDMA).

13. The wireless mobile device of claim 1 wherein said wireless mobile device is used for making financial transactions between a user and said entity with said contactless smart card over said network.
- 5 14. The wireless mobile device of claim 13 wherein said financial transactions between said user and said entity are face-to-face.
15. The wireless mobile device of claim 13 wherein said financial transactions between said user and said entity are remote.
- 10 16. An electronic communication method comprising:
purchasing a good or a service from a merchant; and
paying with a contactless smart card via a wireless mobile device;
wherein said wireless mobile device is adapted to access a wireless network and
15 comprises a subscriber identification module (SIM) card slot and a contactless smart card module electrically connected to said SIM card slot and wherein said contactless smart card module is adapted to receive and read information stored in said contactless smart card and transmit said information to an entity via said wireless network .
- 20 17. The electronic communication method of claim 16 further comprising receiving said good or service electronically and storing it in said contactless card.
18. The electronic communication method of claim 14 further comprising retrieving said good or service from said contactless card and redeeming it.
- 25 19. An electronic payment method utilized by a customer to pay a merchant with electronic cash stored in a contactless smart card for a face-to-face purchase of a good or service comprising:
placing an order by said customer for said purchase of said good or service to said
30 merchant;

providing a wireless mobile device wherein said mobile device is adapted to access a wireless network and comprises a subscriber identification module (SIM) card slot and a contactless smart card module electrically connected to said SIM card slot and wherein said contactless smart card module is adapted to receive and read information stored in said contactless smart card and transmit said information via said wireless network;

entering information of said purchase in said wireless mobile phone;

positioning said contactless smart card in close proximity to said wireless mobile device, retrieving smart card identification information and authorizing withdrawal of an electronic cash amount for payment for said good or service from said smart card;

sending said purchase information, said smart card identification information and said electronic cash amount to an authentication server via said wireless network;

authenticating and sending said purchase information and said electronic cash amount by said authentication server to a business account of said merchant held in a financial institution;

registering said purchase information and depositing said electronic cash amount to said merchant's business account and sending confirmation by said financial institution to said authentication server;

forwarding said confirmation to said wireless mobile phone; and

fulfilling said order to said customer by said merchant.

20. An electronic payment method utilized by a customer to pay a merchant with a contactless smart card for a face-to-face purchase of a good or service comprising:

placing an order by said customer for said purchase of said good or service to said merchant;

providing a wireless mobile device wherein said wireless mobile device is adapted to access a wireless network and comprises a subscriber identification module (SIM) card slot and a contactless smart card module electrically connected to said SIM card slot and wherein said contactless smart card module is adapted to receive and read information stored in said contactless smart card and transmit said information via said wireless network;

- entering information of said purchase in said wireless mobile phone;
positioning said contactless smart card in close proximity to said wireless mobile device, retrieving smart card identification information from said contactless smart card and authorizing payment for said good or service;
- 5 formatting said purchase information, said smart card identification information and said payment authorization into a first message and sending said first message to an authentication server via said wireless network;
 authenticating and sending said first message by said authentication server to a financial institution;
- 10 registering said purchase information and sending approval for said payment by said financial institution to said authentication server;
 forwarding said payment approval to said wireless mobile phone; and
 fulfilling said order to said customer by said merchant.
- 15 21. The electronic payment method of claim 20 wherein said first message comprises a format selected from a group consisting of Short Message Service (SMS), General Packet Radio Service (GPRS), Transmission Control Protocol/Internet Protocol (TCP/IP), User Datagram Protocol (UDP), Simple Mail Transmission Protocol (SMTP), Simple Network Management Protocol (SNMP), and proprietary message formats.
- 20 22. An electronic payment method utilized by a customer to pay a merchant with a contactless smart card for a remote purchase of a good or service comprising:
 placing an order by said customer for said purchase of said good or service to a merchant server via a first network and choosing to pay via a wireless mobile device
25 wherein said wireless mobile device is adapted to access a wireless network and comprises a subscriber identification module (SIM) card slot and a contactless smart card module electrically connected to said SIM card slot and wherein said contactless smart card module is adapted to receive and read information stored in said contactless smart card and transmit said information via said wireless network;
- 30 providing said merchant server with an identification information for said wireless mobile device;

creating a digital order comprising purchase information and said identification number for said wireless mobile device by said merchant server;

routing said digital order to an authentication server via said first network;

formatting said digital order into a first message wherein said first message is
5 adapted to be transmitted over said wireless network;

routing said first message over said wireless network to said wireless mobile device;

displaying said first message on said wireless mobile device;

requesting and receiving authorization of payment from the customer via said
10 wireless mobile device;

positioning said contactless smart card in close proximity to said wireless mobile device and retrieving smart card identification and security information;

formatting authorization result and smart card identification and security information into a second message and routing said second message to said
15 authentication server;

authenticating and routing said second message to a financial institution, wherein said financial institution is the issuer of said contactless smart card; and

approving and executing said payment at said financial institution.

forwarding said payment approval to said authentication server and from said
20 authentication server to said wireless mobile phone; and

fulfilling said order to said customer by said merchant.

23. The electronic payment method of claim 22 wherein said good or service comprises a digital good or a digital service and wherein said fulfilling comprises
25 downloading and storing said digital good or service in said contactless smart card.

24. The electronic payment method of claim 23 wherein said digital good is selected from a group consisting of electronic cash, electronic coupons, electronic gift certificates,
30 electronic transit tokens,, music, software, movies, and books.

25. The electronic payment method of claim 22 wherein said wireless mobile device is selected from a group consisting of a mobile phone, a personal digital assistant, a pager, a wireless laptop computer, a personal computer, a television remote control, and combinations thereof.

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26. The electronic payment method of claim 22 wherein said wireless network is selected from a group consisting of a wireless wide area network (WWAN), a wireless local area network (WLAN), a private network, and a personal area network (PAN).

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27. The electronic payment method of claim 26 wherein said wireless wide area network (WWAN) is selected from a group consisting of a Global System for Mobile Communications(GSM), a Code Division Multiple Access(CDMA), CDMA 2000, and wideband CDMA(WCDMA).

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28. The electronic payment method of claim 22 wherein said first and second messages comprise a format selected from a group consisting of Short Message Service (SMS), General Packet Radio Service (GPRS), Transmission Control Protocol/Internet Protocol (TCP/IP), User Datagram Protocol (UDP), Simple Mail Transmission Protocol (SMTP), Simple Network Management Protocol (SNMP), and proprietary message formats.

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